

Medaacarandaredora

Client:

New Ventures Associates, LLC

Site Location:

Crow Lane Landfill, Newburyport, MA

Site Inspector:

Michael Quatromoni

Inspection Date:

Friday, March 30, 2007

ONGOING ACTIVITIES:

- New Venture's personnel have substantially completed the formation of the perimeter containment berm around Stormwater Detention Basin 2. The outlet control structures are in-place.
- A mobile rock crusher is currently positioned in the Detention Basin 1 area. Rock crushing for onsite use was in progress.
- Haybales had previously been installed around the entire perimeter of the capped landfill area.
 Several bales were observed to require adjustment and re-positioning at this time. The temporary let-down channels on the westerly berm had been formed. Minor perimeter berm surface grading required to remove low spots. Several washout areas along the outside face of the northerly and westerly perimeter berm will require maintenance and repairs.
- Grading and shaping materials were being accepted at the time of the inspection. Mixing with soil is on-going. An excavator was operating in the soils pile to load the rock truck with soils. The rock truck then transports the soils to the active material placement area where it is mixed with the fines during placement. Material placement being performed by a CAT compactor. Ample soils on-site and available for mixing operations.
- Previously reported rips observed in the HDPE membrane cap at the northeast corner of the landfill have not been repaired due to weather constraints. These rips are directly at the base of the landfill slope. This work will be done as soon as weather allows but prior to the full activation of the horizontal gas collection system. Locations identified along the base of the northerly slope will also be investigated and repaired as necessary.
- Previously reported tarp adjustments at the top of slope along the landfill haul road were performed by New Ventures. Recent heavy winds have caused subsequent disturbance to these tarps and minor re-positioning is required.
- Miscellaneous debris observed around the northerly and westerly perimeter of the landfill to be removed as soon as practicable.
- New Ventures is currently working on shaping the southerly slope of the landfill. Topographic survey of the slope has been scheduled. Cover soils or tarps should be applied upon completion.

LANDFILL GAS MONITORING and SYSTEM OPERATIONS:

• The Landfill gas flare was fully operational during the inspection. Observed temperature at the time of inspection was 1585° F with a flow rate of 185 scfm.

- The pre-treatment system consists of two in-line Sulfa-Treat vessels that are connected to the flare. The Sulfa-Bind vessel was situated adjacent to the Sulfa-Treat vessel and was in the off-line mode. The pre-treatment system appeared to meet its performance standard of 95% H₂S reduction into the flare during this period.
- NV personnel have been performing landfill gas monitoring in accordance with the protocol and the recording forms developed by SITEC and the operational guidelines developed by SITEC and Cornerstone Environmental Group. Completed forms and stationary H₂S meter readings from Charmanski Drive are faxed to DEP and SITEC daily. The following is a summary of the landfill gas system monitoring as reported during the week:
 - Landfill surface and site perimeter monitoring was performed for odors using the Jerome Meter. Low level detections were periodically reported during both the perimeter and surface monitoring at Location 6. The maximum limit detected was 0.007 ppm with a corresponding odor factor of 1. There were no odor complaints received by the facility during this period. These locations should be investigated to determine the source of the odor.
 - O The stationary meter at Charmanski Drive operated continuously. There were no elevated H₂S readings recorded from the 24th through the 31st. One anomalous reading of 0.19 ppm was recorded on the 30th when the meter was first turned on. Subsequent readings were recorded at or below the instrument detection limit. This reading is suspected to be instrument error.
 - Header vacuum readings were maintained between 0.3" and .9" from the 24th to the 31st.
 Well head readings ranged from 0.3" to 0.4".
 - O The enclosed flare maintained operating temperatures ranging from 1545°F and 1660°F from the 24th to the 31st.
 - O The enclosed flare was operated at flow rates ranging from 182 to 210 scfm from the 24th to the 31st with an average operating rate of 196.6 scfm.
 - Vertical well head readings were recorded throughout the week.
- The vertical well landfill gas extraction system appears to be fully functional. Several landfill gas extraction wells were observed to be in need of maintenance or repair in the near future. A well head on the horizontal collection system located on the westerly slope is damaged. The boot seals around each of the wells should be examined to determine if there is leakage occurring. Boot seals should be taped or caulked as needed. Rubber "FERNCO" fittings on several horizontal system well heads should be inspected for damage due to bending. Permanent caps should be installed on all vertical riser pipes that are currently capped with duct tape to eliminate possible leakage and emissions. Flex hoses between the wells and the riser pipes should be adjusted to eliminate dips that could trap condensate and reduce flow from the well.

CERTIFICATION (310 CMR 19.011):

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is accurate, true and complete. I am aware that there are significant penalties both civil and criminal for submitting false information including possible fines and imprisonment.

Michael Quatromoni, Project Manager